R E P O R T R E S U M E S

ED 020 824 RC 002 023

A RESTUDY OF THE ACCEPTANCE OF EDUCATIONAL PROGRAMS IN RURAL WISCONSIN.

BY- KREITLOW, BURTON W. BUTTERFIELD, PAUL G.
WISCONSIN UNIV., MADISON, DEPT. OF AGR./EXT. EDUC.

REPORT NUMBER BULL-582 PUB DATE APR 66
EDRS PRICE MF-$0.25 HC-$1.36 32P.

DESCRIPTORS- ADULT EDUCATION PROGRAMS, ADULT FARMER EDUCATION, AGRICULTURAL TRENDS, *ATTITUDES, CULTURAL BACKGROUND, CULTURAL FACTORS, *EDUCATIONAL ATTITUDES, EDUCATIONAL OBJECTIVES, EDUCATIONAL PRACTICE, *ETHNIC GROUPS, FAMILY STRUCTURE, FAMILY INFLUENCE, LEARNING MOTIVATION, RELIGIOUS FACTORS, RURAL EDUCATION, *RURAL FAMILY, SOCIAL ORGANIZATIONS, *SOCIOECONOMIC INFLUENCES,

RURAL ADULTS IN 38 LOCALITIES IN WISCONSIN WHO WERE STUDIED IN 1953 TO DETERMINE ATTITUDES AND ACTIONS TOWARD EDUCATIONAL PRACTICES, FARMING PRACTICES, AND ORGANIZATIONAL PARTICIPATION, WERE RESTUDIED IN 1963. ELEVEN OF THE 19 LOCALITIES CONSIDERED HOMOGENEOUS IN ETHNIC AND RELIGIOUS COMPOSITION IN 1953 HAD BECOME HETEROGENEOUS AND WERE TREATED IN SEGMENTS OF THE RESTUDY AS A THIRD TYPE OF LOCALITY GROUP. SUBJECTS IN HETEROGENEOUS LOCALITIES WERE FOUND TO BE CONSISTENTLY MORE FAVORABLE TOWARD EDUCATIONAL PRACTICES THAN THOSE IN HOMOGENEOUS LOCALITIES. BOTH GROUPS INDICATED LESS FAVORABLE ATTITUDES TOWARD ADULT EDUCATION CLASSES, JOINT PARENT-TEACHER PLANNING OF CURRICULUM, AND THE NEED FOR PARENT ORGANIZATIONS IN THE SCHOOL. THE CHANGED GROUP WAS MORE LEARNING-OREINTED THAN THE OTHER 2. BOTH HOMOGENEOUS AND HETEROGENEOUS LOCALITIES SHOWED INCREASED ACCEPTANCE OF IMPROVED FARM PRACTICES. NO SIGNIFICANT DIFFERENCES WERE FOUND BETWEEN GROUPS IN THEIR PARTICIPATION IN ORGANIZATIONS. ATTITUDES OF RELIGIOUS-ETHNIC GROUPS WERE ANALYZED INDIVIDUALLY AND COMPARED TO EACH OTHER. A RELATED DOCUMENT IS RC 002 503. (JEH)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

BULLETIN 582

APRIL • 1966

A RESTUDY OF THE ACCEPTANCE OF EDUCATIONAL PROGRAMS IN RURAL WISCONSIN

EXPERIMENT STATION • COLLEGE OF AGRICULTURE • UNIVERSITY OF WISCONSIN

SUMMARY AND CONCLUSIONS

Rural adults in 38 locality groups living on the same farmsteads studied by Duncan in 1953 were restudied 10 years later to determine their attitudes and actions toward selected educational programs, farming practices and organizational participation. Results of the 2 studies were compared and extensions of the study undertaken to explore adult learning orientations. The original study and the restudy compared 19 pairs of homogeneous and heterogeneous localities. The extensions included comparison of rural adults living in 3 locality group types: the homogeneous, in which 80% or more respondents were of the same religion and national origin; the heterogeneous, in which no religious-ethnic pattern dominated; and the changed, in which locality groups which were homogeneous in 1953 were not homogeneous in 1963. Conclusions of the restudy and extensions follow:

THE 1963 RESTUDY

1. Adults in localities which are heterogeneous as to their ethnic and religious characteristics are more favorable to school programs and practices than those in homogeneous localities.

2. Adults in heterogeneous localities attain and express a desire for higher educational goals than those in homogeneous groups.

3. No differences exist between adults in homogeneous and heterogeneous groups in their overall participation in organizations.

4. Adults in heterogeneous locality groups show higher socio-economic status scores.

5. Adults in homogeneous locality groups indicated greater locality and family strength.

6. Adults in homogeneous locality groups tend to accept improved farm practices more readily than they accept improved school practices.

CHANGE BETWEEN 1953 AND 1963

1. Eleven of the original 19 homogeneous locality groups did not mee the criteria for homogeneity in 1963 due to change in ethnic and/or religious composition.

2. Both heterogeneous and homogeneous locality groups indicated significant change toward the acceptance of improved educational curriculum and facilities. This phenomenon is emphasized by the increased interest in school reorganization, with broader opportunities for youth, the present educational attainment of husband, wife, and children out of school, the education desired for children in school and belief in the reduced number of grades that one teacher can handle for best results in the classroom.

3. Both homogeneous and heterogeneous locality groups indicated an attitude change less favorable toward the need for joint parent and teacher planning of the curriculum and the need of parent organizations in the school.

4. Both homogeneous and heterogeneous locality residents showed less interest than formerly in attending evening classes taught by the county agent, home agent, or agriculture teacher.

5. Heterogeneous locality groups continued to lead homogeneous groups in the acceptance of improved farm practices. Results of the research indicated that the margin of acceptance between the 2 groups was considerably less in 1963 than it was in 1953.

EXTENSIONS OF THE STUDY

1. Rural adults living in heterogeneous locality groups exhibited more positive attitudes toward elementary school practices than the changed group. The heterogeneous group was more positive toward high school and adult educational programs than the homogeneous group.

2. The Danish-Lutherans in heterogeneous groups were more positive toward organizational participation than Danish-Lutherans in homogeneous or changed groups. The German-Catholics in homogeneous groups were more positive toward adult education than German-Catholics in heterogeneous groups.

3. Rural adults in these cultural settings had broad interest in adult education. The homogeneous group was less need-fulfillment oriented than the heterogeneous group, and the changed group was more learning oriented than the heterogeneous group.

4. Changes in educational attitudes were not great during the decade. The changed group's scores were erratic, sometimes they were higher and sometimes lower than scores of the other 2 groups, but they fell mainly between the other 2. The homogeneous group was more active in farm organizations, and the changed group held more offices than they had in 1953. Homogeneous groups scored lower in school and civic organizational participation in both 1953 and 1963.

A RESTUDY OF THE ACCEPTANCE OF EDUCATIONAL PROGRAMS IN RURAL WISCONSIN

Burton W. Kreitlow and Paul G. Butterfield***

BACKGROUND OF THE STUDIES

THE INITIAL STUDY—1953

Kreitlow and Duncan,[1] building on earlier studies of cultural groups,[2] studied differences in attitudes toward educational programs and practices between rural neighborhoods that were homogeneous in their

* Burton Kreitlow is Professor of Adult Education at the University of Wisconsin, Madison, Wisconsin.

** Paul Butterfield is Director of Summer and Evening School, Associate Professor of Adult Education, Weber State College, Ogden, Utah.

[1] Kreitlow, B. W. and Duncan, J. A., *The Acceptance of Educational Programs in Rural Wisconsin*, Agricultural Experiment Station Research Bulletin No. 525 (Madison, Wisconsin: University of Wisconsin), July, 1956.

[2] D. G. Marshall, "Education in Rural Wisconsin" (unpublished M.S., University of Wisconsin, 1952), W. A. DeHart, "Significance of Cultural Factors in the Determination of Educational Behavior of Farm Families in Selected Rural Wisconsin Communities," (unpublished Ph.D. Thesis, University of Wisconsin, 1950), D. G. Marshall, W. H. Sewell and A. O. Haller, "Factors Associated with High School Attendance of Wisconsin Farm Youth," *Rural Sociology*, XVIII:3 (Sept., 1953), pp. 257-260; B. W. Kreitlow and R. A. Koyen, "A Longitudinal Study of Newly Formed Centralized Rural School Districts in Wisconsin," First Progress Report (unpublished M.S., University of Wisconsin, 1951), p. 196f.; H. A. Pederson, "Acculturation Among Danish and Polish Ethnic Groups in Wisconsin" unpublished Ph.D. Thesis, University of Wisconsin; and H. A. Pederson, "Cultural Differences in the Acceptance of Recommended Practices," *Rural Sociology*, XVI:1 (March, 1951), pp. 37-49.

ethnic and religious compositions (80% of a single ethnic and religious background) and those that were heterogeneous (50% or less in the dominant ethnic and religious stock) in these respects. They defined the rural neighborhood[3] as "that locality grouping in the community which in terms of interpersonal relationships is one step removed from the family." This locality group is bound together either by social or economic ties, often by the one room school, the church or a rural crossroads store.

Neighborhood as defined and delineated in 1953 was a small locality grouping of people having identifiable primary contacts and a sense of belonging together. The criteria applied in delineation were nationality, religion, school district and the economic services. After determining that neighborhoods met the sociological criteria listed above, the rural elementary school district lines were used as the boundaries of the neighborhood. This was done to facilitate the research operation. The rural elementary school district was considered in this case to constitute the major part of the neighborhood area, and it was believed that the school district is more compatible with the concept neighborhood than an area defined by any other criteria. The authors, with the aid of extension agents, local and county school personnel, and neighborhood residents, delineated all neighborhoods in the study.

Attitude[4] was defined as "the verbal expression of one's opinions, feelings, beliefs, and actions ascertained in a personal interview situation in answer to direct questions." Actions referred to adoption of a practice, e.g. using a high analysis fertilizer or participating in a program or an organization.

The Null Hypothesis Tested in the 1953 Study Was:

> **There is no difference between neighborhood groups that are homogeneous as to their ethnic and religious characteristics and neighborhood groups that are heterogeneous as to these characteristics, in their acceptance of selected educational programs and practices as represented by (1) opinions and actions toward school**

[3] To avoid confusion, whenever the 3 groups; homogeneous, heterogeneous, and changed are referred to in this document they will be called "locality groups" rather than neighborhoods. This will be true in reference to the 1953 study which in its original form used the term "neighborhood" exclusively.

[4] L. L. Thurstone and E. J. Chave, *Measurement of Attitudes* (Chicago: University of Chicago Press, 1929), p. 6f.

practices and programs, (2) the adoption of recommended farming practices, and (3) participation in formal organizations.

Three assumptions were basic in development of the study. These assumptions were (1) that educational attitudes can be determined from the expression of opinions, beliefs and actions in response to questions asked in a personal interview situation regarding educational practices in the school, on the farm and in organizational participation. (2) A series of neighborhood groups can be delineated according to sociological definition and matched on the basis of certain predetermined cultural, educational, economic and geographic criteria. (3) Measures of acceptance of selected educational programs and practices can be determined by response to single items and indices developed from a series of items.

Sources of Data and Procedures. The data were obtained by personal interview in 38 rural neighborhoods located in southern, southwestern, central, and northwestern Wisconsin. Graduate students in rural and adult education, trained in interview techniques for the study, interviewed all respondents. The neighborhoods were selected so as to constitute 19 matched pairs, one in each pair being homogeneous in ethnic and religious characteristics and the other heterogeneous in these respects. The 2 neighborhoods in each pair were matched as closely as possible on the following characteristics: (1) Size in square miles, (2) distance from city or village, (3) type of farming, (4) density of population, (5) type of school district organization, (6) number of pupils of school age, and (7) equalized evaluation per school-age pupil. The 19 pairs represented a range of agricultural land types, of school systems, and specific major ethnic-religious groups in the state. The ethnic-religious groups of the homogeneous neighborhoods included: German-Catholic, German-Lutheran, Norwegian-Lutheran, Danish-Lutheran, Swedish-Lutheran, Polish-Catholic, and Swiss-Evangelical and Reformed. Table I provides a summary of the data on which neighborhoods were matched.

After the neighborhoods had been delineated and matched, population lists were made and verified from the county farm-plat books. Since the neighborhood, rather than the individual, was to be the unit of analysis,[5] a random sample of 10 farm families was selected from each neighborhood, making a total of 380 interviewees. Five

[5] For this concept, see B. R. Fisher, *et al.*, *Peacetime Use of Atomic Energy*, Vol. 1 (Ann Arbor, Michigan, Survey Research Center, University of Michigan, 1951). p. 6.

Table 1.—The Results of the Application of the Criteria in the Selection and Matching of Neighborhood Groups

1 Pair no.	2 Group no.	3 Neighborhood name	4 Ethnic* stock	5 Religion*	6 Size[1] sq. mi.	7 Distance from city or village	8 Type of farming[2]	9 Type of school district[3]	10 Density of population[4]	11 No. of pupils school age[5]	12 Equal. evaluation per pupil[6]
I	1	Ross	Si	ER	6.5	3 Mi. New Glarus	Dairying	One Room	16 Sq. Mi.	37	$ 22,500
	2	Jordan Center	I,Si,N,E,G,M	L—C—ER	5.0	5 Mi. Argyle	Dairying	One Room	18 Sq. Mi.	30	$ 15,000
II	3	Marty	Si	ER	8.0	5 Mi. Monticello	Dairying	One Room	18 Sq. Mi.	42	$ 15,500
	4	Dutch Hollow	Si,N,I,M	ER—L—C	7.0	7 Mi. Monticello	Dairying	One Room	18 Sq. Mi.	35	$ 14,000
III	5	Prairie Queen	N	L	4.5	2 Mi. Cambridge	Dairying	One Room	31 Sq. Mi.	35	$ 12,700
	6	Albion Prairie	N,G	L—C—O	6.0	4 Mi. Edgerton	Dairying	One Room	30 Sq. Mi.	40	$ 18,500
IV	7	Marxville	G	L	9.0	7 Mi. Mazomanie	Dairying	2-1 Room Schools	22 Sq. Mi.	74	$ 12,100
	8	Norway Grove	N,G,I,M	L—P—ER—C	12.0	5 Mi. Waunakee	Dairying	Two Room	22 Sq. Mi.	67	$ 22,500
V	9	Roxbury	G	C	6.5	3 Mi. Sauk City	Dairying	Parochial 4 Room	24 Sq. Mi.	167	$ 4,500
	10	Windsor	N,G,M	L—C	5.5	2 Mi. DeForest	Dairying	Two Room	22 Sq. Mi.	140	$ 6,400
VI	11	Martinsville	G	C	6.0	6 Mi. Waunakee	Dairying	Parochial 3 Room	26 Sq. Mi.	75	$ 7,400
	12	Mt. Vernon	N,G,Si,E,M	L—C—ER—B	5.5	8 Mi. Verona	Dairying	One Room 36 Pupils	18 Sq. Mi.	61	$ 8,400
VII	13	Sandridge	N	L	5.2	5 Mi. Black Earth	Dairying	One Room Reorg.	17 Sq. Mi.	*	*
	14	Booth	G,S,I,M	L—C—ER—M	5.2	4 Mi. Black Earth	Dairying	One Room Reorg.	17 Sq. Mi.	*	*
VIII	15	Ashton	G	C	7.5	5 Mi. Middleton	Dairying	Parochial 3 Room	27 Sq. Mi.	100	$ 9,500
	16	Token Creek	N,G,M	L—C—O	5.0	6 Mi. Sun Prairie	Dairying	One Room	27 Sq. Mi.	57	$ 10,100
IX	17	Kieler	G	C	4.0	8 Mi. Dubuque	Dairying	Parochial	25 Sq. Mi.	95	$ 5,650
	18	Arthur	N,G,M	L—M—O	6.0	9 Mi. Platteville	Dairying	Two Room	18 Sq. Mi.	68	$ 7,900
X	19	Sullivan	P	C	5.4	Adj. Princeton	Dairying	Non-Operating Reorg.	23 Sq. Mi.	*	*
	20	Mt. Tom	G,P,M	L—C	6.4	Adj. Princeton	Dairying	Non-Operating Reorg.	17 Sq. Mi.	*	*
XI	21	West Sweden	Sw	L	7.9	5 Mi. Frederic	Dairying	Reorganized	23 Sq. Mi.	50	$ 5,956
	22	Horseshoe Lake	G,D,Sw	L—C—O	7.1	4 Mi. Turtle Lake	Dairying	Reorganized	19 Sq. Mi.	28	$ 9,818
XII	23	Edgewood	N	L	9.0	5 Mi. Clear Lake	Dairying	Reorganized	22 Sq. Mi.	74	$ 5,238
	24	Liberty	N,D,Sw,G	L—M—O	7.5	4 Mi. Clear Lake	Dairying	Reorganized	22 Sq. Mi.	49	$ 5,145
XIII	25	Sand Lake	Sw	L	4.3	6 Mi. St. Croix	Dairying	Non-operating	20 Sq. Mi.	19	$ 19,337
	26	Ubet	D,Sw,G,M	L—M—B	4.0	8 Mi. St. Croix	Dairying	Non-operating	20 Sq. Mi.	17	$ 18,830
XIV	27	Cedar Lake	N	L	11.0	9 Mi. New Richmond	Dairying	Two Room	19 Sq. Mi.	49	$ 14,882
	28	Alabama	N,D,G,Sw	L—M—O	8.5	9 Mi. Luck	Dairying	One Room	24 Sq. Mi.	41	$ 10,539
**XV	29	Deronda	N	L	7.1	3 Mi. Amery	Dairying	Two Room	24 Sq. Mi.	75	$ 10,293
	30	Wanderoos	N,G,D	L—M	11.0	6 Mi. Amery	Dairying	Two Room	24 Sq. Mi.	91	$ 5,857
XVI	31	North Star	D	L	3.0	2 Mi. Luck	Dairying	One Room	19 Sq. Mi.	44	$ 5,567
	32	Oak Hill	D,S,M	L—M—B	9.0	7 Mi. Luck	Dairying	Two Room	23 Sq. Mi.	62	$ 5,560
XVII	33	Little Butternut	D	L	5.0	2 Mi. Luck	Dairying	One Room	19 Sq. Mi.	35	$ 7,000
	34	Lanesdale	G,D,Sw	L	8.3	7 Mi. Luck	Dairying	One Room	23 Sq. Mi.	40	$ 9,412
XVIII	35	Silver Lake	G	L	6.5	6 Mi. Clayton	Dairying	One Room	21 Sq. Mi.	46	$ 5,543
	36	Deer Lake	N,G,D,Sw	L—M—O	7.0	5 Mi. Balsam Lake	Dairying	One Room	17 Sq. Mi.	54	$ 8,990
XIX	37	Little Falls	N	L	6.0	5 Mi. Amery	Dairying	One Room	19 Sq. Mi.	43	$ 5,116
	38	Volga	N,G,Sw	L—C—O	6.0	4 Mi. Amery	Dairying	One Room	24 Sq. Mi.	40	$ 7,867
XX	39	Lakeside	N	L	6.0	7 Mi. Amery	Dairying	One Room	19 Sq. Mi.	48	$ 7,331
	40	Bunyan	D,Sw,M	L—B	5.5	5 Mi. Balsam Lake	Dairying	One Room	16 Sq. Mi.	46	$ 7,022

*Column 4: Si = Swiss, N = Norwegian, G = German, D = Danish, Sw = Swedish, P = Polish, E = English, M = Mixed, I = Irish

*Column 5: L = Lutheran, C = Catholic, ER = Evang. Ref., M = Methodist, B = Baptist, O = Other

**This pair deleted from study because it did not meet the criterion on homogenity.

*Columns 11 and 12: Information not available.

SOURCES OF INFORMATION FOR DATA IN TABLE I

[1]County Plat Book Township Map. Available at all County Clerk's Offices.
[2]Wis. County Agricultural Statistics Services, Wis. Crop and Livestock Reporting Service, State Capitol, Madison, Wisconsin.
[3]Office of County Supt. of Schools.
[4]Same as [3] above.
[5]School Census reports on file in office of County Superintendent of Schools.
[6]Annual Reports of County Supt. of Schools.

of the interviews were conducted with male heads of families and 5 with the wives. The 10 families per neighborhood comprised from 20 to 75% of the farm families in the neighborhoods.

The interview schedule consisted of 30 questions on attitudes toward various school practices, developed and pretested by Kreitlow and Duncan; a 25-item index of farm-practice adoption, adapted from an index developed by Wilkening[6] a formal-organization participation scale adapted from Chapin,[7] Sewell's Scale of Socio-economic Status (Short Form)[8] an index of neighborhood strength, adapted from Alexander and Nelson[9] and an index of "Strength of Familism" developed by Wilkening.[10]

Scores were computed for each respondent on the basis of the degree of his expressed favorability toward the specified school practices, the participation of all family members in formal organizations, and his standing on the other indices. Mean neighborhood scores were then computed for each educational practice and each index. These mean scores were the values used to compare the neighborhoods making up the pair. Thus each neighborhood, rather than each respondent, was given equal weight in the basic analysis.

To determine the significance of differences among the pairs of homogeneous and heterogeneous neighborhoods in the acceptance of

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[6] E. A. Wilkening, "The Acceptance of Certain Agricultural Programs and Practices in a Piedmont Community of North Carolina" (unpublished Ph.D. Thesis, University of Chicago, 1949); "A Socio-psychological Approach to the Study of Acceptance; of Innovations in Farming," *Rural Sociology*, XV:4 (December, 1950), pp. 352-364; *Acceptance of Improved Farm Practices in Three Coastal Plain Counties of North Carolina*, AES Tec. Bull. 98 (Raleigh, May, 1952); and "Sources of Information for Improved Farm Practice," *Rural Sociology*, XV:1 (Mar., 1950) pp. 19-30.

[7] F. S. Chapin, "Social Participation and Social Intelligence," *American Sociological Review*, IV:2 (April, 1939), pp. 157-168; and *The Social Participation Scale* (Minneapolis: University of Minnesota Press, 1937).

[8] W. H. Sewell, "Short Form of the Farm Family Socio-Economic Status Scale," *Rural Sociology*, VIII:2 (June, 1943), pp. 161-170.

[9] Frank Alexander and Lowry Nelson, *Rural Social Organization in Goodhue County, Minnesota*, Minnesota AES Bull. 401 (Minneapolis, Feb., 1949), p. 10f.

[10] E. A. Wilkening, "Change in Farm Technology as Related to Familism, Family Decision Making, and Family Integration," *American Sociological Review*, XIX:1 (February, 1943), pp. 29-37; and Techniques of Assessing Farm Family Values," *Rural Sociology*, XIX:1 (March, 1954), pp. 39-49.

all educational practices and indices, the statistical sign test was used.[11]

THE RESTUDY—1963

The restudy was conducted in 3 parts, the project director and 3 field investigators worked jointly in revision and pretesting of the instrument, and in collecting the data by personal interview. Krull's portion[12] was limited to a restudy of the educational practices. Maughan[13] restudied the farm practices and organizational participation. He also summarized Krull's study in order to integrate and make uniform comparison between the restudy and the initial study. Butterfield[14] used the data from the basic instrument and from an added section to study rural adult attitudes and learning orientations in selected cultural settings. This portion is described in the section on "extensions of the study."

Sources of Data and Procedures. In the restudy the same 38 locality groups were used as were used in 1953. In each locality the 10 farmsteads, selected at random by Duncan in 1953 were used again, regardless of the people living on the farmstead. If the previous farm house was vacant or removed, a farmstead selected as an alternate in the initial study was used in the restudy. The basic instrument used in 1953 was slightly revised to incorporate modern practices for use in recording opinions, beliefs, and actions. All revised items followed initial items closely so that the setting would remain as much like that in the initial study as possible.

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[11]W. J. Dixon and F. S. Massey, Jr., *Introduction to Statistical Analysis* (New York: McGraw Hill Book Co., 1951), pp. 290-294; and L. E. Moses, "Non-Parametric Statistics for Psychological Research," *Psychological Bulletin*, XLIX: 2 (March, 1952), pp. 122-143.

[12] Krull, Rex G., "The Relationship of Selected Cultural Characteristics to the Acceptance of Educational Concepts and Programs Among Neighborhoods in Reorganized Rural School Districts in Wisconsin," Unpublished Seminar Report for specialist in educational administration, University of Wisconsin, 1963.

[13]Maughan, Wesley T., "A Study of the Relationship of Selected Cultural Characteristics to the Acceptance of Educational Programs and Practices Among Certain Rural Neighborhoods in Wisconsin," unpublished Ph.D. Thesis, University of Wisconsin, 1964.

[14] Butterfield, Paul G., "Educational Attitudes and Learning Orientations of Rural Adults in Selected Cultural Settings," Unpublished Ph.D. Thesis, University of Wisconsin, 1965.

It was evident at the outset of the restudy in 1963 that some localities which were homogeneous in 1953 would no longer be homogeneous on the basis of the initial 80% homogeneity criterion. However, Maughan[15] set out to determine if change had taken place over the decade and was obliged to examine the groups as originally established. He did, however, make some comparisons among the heterogeneous group, the group which remained homogeneous and the group which changed from homogeneous to heterogeneous during the decade. Maughan compared the 3 locality group types on acceptance of farming practices. Butterfield[16] compared the three locality group types on their attitude favorability toward the variables (a) educational practices (b) adult educational participation and (c) organizational participation. He made camparisons of the religious-ethnic patterns represented in the study on the 3 variables and compared adults living in the 3 locality group types on their orientation to learning.

RESULTS OF THE INVESTIGATIONS

THE INITIAL STUDY SUMMARIZED[17]

Results of the 1953 study are summarized in the following 9 items comparing adults living in **heterogeneous** and **homogeneous** locality groups.

(1) Adults living in heterogeneous locality groups were consistently more favorable toward a majority of the school practices than were homogeneous groups.

(2) In reaction to 30 school practices, the adults in heterogeneous locality groups were significantly more favorable toward 5, more favorable toward 15, showed no difference toward 7, and were significantly less favorable on 3 of the questions.

(3) Differences were greatest favoring those in heterogeneous locality groups on educational goals, aspirations and attainments.

(4) The majority of the practices consistently favored by heterogeneous locality group citizens represent those school practices considered by educators as being necessary to furnish a comprehensive educational program. Examples of these were: smaller number of grades per

[15] Maughan, *op. cit.*, p. 1.

[16] Butterfield, *op. cit.*, p. 1.

[17] A detailed summary is found in Agricultural Experiment Station Bulletin 525, Madison, Wisconsin: University of Wisconsin, July, 1956.

teacher, health service, school lunches, more college training for teachers, and the use of school facilities for non-school activities.

(5) Farmers in heterogeneous locality groups adopted significantly more improved farming practices than did farmers in homogeneous groups.

(6) On the 4 elements of organizational participation, homogeneous locality group residents belonged to more organizations, while residents of heterogeneous locality groups attended more meetings, held more offices and served on more committees.

(7) Homogeneous locality group residents participated to a greater extent in church and social organizations, while heterogeneous locality group residents showed greater participation in agricultural and school organizations.

(8) Heterogeneous locality group residents had higher socio-economic status scores.

(9) Homogeneous locality group residents showed greater neighborhood and family strength.

RESULTS OF THE RESTUDY

The Acceptance of School Practices. Results of comparisons between homogeneous and heterogeneous locality groups in 1963 revealed that subjects in heterogeneous locality groups were consistently more favorable toward school practices than were those in homogeneous locality groups. Of the 29 specific questions on which the groups were compared, the heterogeneous group favored 22, the homogeneous favored 3, and on 4 practices, the 2 groups were alike in their attitudes and opinions. The specific items are identified in the groups of items which follow.

School Practice Items on Which There Were Statistically Significant Differences Favoring Heterogeneous Locality Groups[18]

1. The provision of health examination by the school.
   (1% level)
2. Educational aspiration for children now in school.
   (1% level)
3. The number and kinds of physical education items and personnel that should be available in the school.
   (5% level)
4. Formal education necessary for boys to be farmers.
   (5% level)

[18] Items 1 and 2 are significant at the 1% level and items 3 and 4 significant at the 5% level.

School Practice Items on Which Differences Were Numerically in Favor of Heterogeneous Locality Groups[19]

1. The number of grades each elementary school teacher can best handle with 25 pupils.
2. The importance of art, music and recreation in the school.
3. Necessity of modern conveniences in the school.

School Practice Items on Which Differences Were Numerically in Favor of Homogeneous Locality Groups

1. The emphasis placed on reading, writing and arithmetic in the schools.
2. Will not lose control over schools if reorganization takes place.
3. Amount of formal education required for elementary teachers.

School Practice Items on Which There Were Numerical Similarities in Attitude and Opinion between Homogeneous and Heterogeneous Locality Groups

1. Satisfaction with operation of schools since reorganization took place.
2. Satisfaction with the publicity program regarding school reorganization.
3. The provision of pupil transportation by the school district.
4. Utilizing school building 9 months of the year or longer.

Table 2 shows the composite of all pairs of observations made on 9 categories of school practices for the 19 pairs of locality groups. A total of 525 observations were made. The heterogeneous locality groups were more favorable in 299 or 56.9% of the pairs of observations. Homogeneous locality groups were more favorable in 170, or 32.7%, with 50 or 10.7% of the pairs having the same favorability score.

Table 3 shows the comparison between 19 matched pairs of localities on their farm practice acceptance scores in 1963. The locality acceptance scores were determined by averaging the farmstead scores within each locality. Farmstead scores were developed by determining the percentage of the 25 farm practices which were applicable on each farmstead. Thus a score of 53 for a locality group indicated an acceptance

[19] These differences were below the 5% level of significance.

Table 2.—Summary Table Showing the Distribution of the Total Number of Pairs of Observations of 9 Categories of School Practices for 19 Pairs of Locality Groups in 1963

Summary School Practices	Pairs of Observations Favored by Homo.	Pairs of Ties between Groups	Pairs of Observations Favored by Hetero.	Total Pairs of Observations
		—Number—		
1. Elementary School Program	46	8	79	133
2. School Organization and Reorganization	37	13	38	88
3. Pupil Transportation	13	6	19	38
4. School Lunch	5	6	8	19
5. Out-of-School Activities	6	4	9	19
6. High School Program	15	1	41	57
7. Teacher Training	18	1	19	38
8. Adult Education	11	10	36	57
9. Education Attainment and Aspiration	19	7	50	76
Total Pairs of Observations	170	56	299	525
Per cent	32.4%	10.7%	56.9%	100.0%

rate of 53% of the applicable practices. The scores for the 19 pairs of localities were compared by determining the differences between each single pair in the series.

The heterogeneous localities had larger farming adoption practice scores in 11 of the pairs while the homogeneous localities had larger scores in 8 of the pairs.

Column 4 of Table 3 shows the numerical differences between the matched pairs of localities. The numerical difference between the heterogeneous locality group that had a higher score than its homogeneous pair is shown by a plus (+) sign, and the difference between the

Table 3.—The Comparison between Homogeneous and Heterogeneous Locality Groups in Their Acceptance Scores on Selected farming Practices

(1963)

Pair No.	Homogeneous	Heterogeneous	Difference between Pairs
1	53	41	−12
2	58	64	+ 6
3	51	44	− 7
4	42	44	+ 2
5	49	53	+ 4
6	50	55	+ 5
7	36	58	+22
8	66	58	− 8
9	64	61	− 3
10	36	46	+10
11	34	51	+17
12	40	45	+ 5
13	47	39	− 8
14	49	39	−10
15	31	50	+19
16	36	43	+ 7
17	52	50	− 2
18	51	54	+ 3
19	62	50	−12

N = 19

r = 8, sign test shows no significant differences at the .05 level. (W. J. Dixon and F. J. Massey, Jr., *Introduction to Statistical Analysis*, McGraw-Hill, New York, 1951, pp. 248-249.

homogeneous groups that had a higher score than their heterogeneous match is shown by a minus (—) sign. The 11 pairs that show plus differences have a range of 2 to 22 and the 8 pairs that show minus differences have a range of 2 to 12. When the differences are tested for statistical significance by the nonparametric statistical sign test, N = 19, and the value of r, which is the number of unlike signs, equals 8, no statistically significant differences were found.

Organizational Participation. There were no statistically significant differences found between homogeneous and heterogeneous locality groups on the elements of organizational participation in 1963. Table 4 shows a comparison between the 19 matched locality groups. The uniformity between the 2 locality types is evident in the totals row on Table 4 which shows nearly equal favorability when the groups were compared on 5 items of organizational participation.

Table 4.—A Comparison between Homogeneous and Heterogeneous Locality Groups in Formal Organizational Participation

Organizational Participation	Number of Pairs in Which: Homogeneous Localities Scored Higher	Both Scored Same	Heterogeneous Localities Higher	Difference in favor of
1. Number of Memberships in Formal Organizations	11	0	8	Homo
2. Attendance at Meetings During Past Year	9	1	9	0
3. Offices Held in Formal Organizations	8	1	10	Hetero
4. Committees Served on During Past Year	10	1	8	Homo
5. Composite Organizational Participation Score (Compos. of 1, 2, 3, 4)	9	1	9	0
Total No. Pairs	47	4	44	

Selected Cultural Factors Related to Educational Attitudes and Actions. Table 5 shows a comparison between homogeneous and heterogeneous locality groups on selected cultural factors in 1963. The 3 cultural factors are socio-economic status, locality group strength, and family strength.

Table 5.—A Comparison between Homogeneous and Heterogeneous Localities on Selected Cultural Factors (1963)

Cultural Factors	Number of Pairs: Practice Favored by Homogeneous 1963	Practice Favored by Heterogeneous 1963
1. Socio-economic	5	14
2. Locality Strength	11	8
3. Family Strength	12	7

Heterogeneous groups indicated a higher mean score in 14 of the 19 pairs of localities for socio-economic status. Homogeneous groups indicated higher mean scores in 11 of the 19 pairs when compared on locality strength. Homogeneous groups indicated a higher ratio on the index of familism than their heterogeneous pair in 12 of the 19 pairs in 1963.

COMPARISONS OF FINDINGS BETWEEN THE 1953 AND 1963 STUDIES

The Acceptance of School Practices. Table 6 displays a composite of all observations made on 9 categories of school practices for the homogeneous localities and indicates changes in attitudes and opinions between samples in 1953 and 1963. In the 9 categories of school practices there were 28 specific school items from which change in attitudes and opinions was measured.[20] The data reveal that the homogeneous groups in 1963 had substantially greater favorability toward school practices than the homogeneous groups in 1953. A total of 513 observations were made. The 1963 groups were more favorable in 294 or 57.4% of the observations, groups in 1953 were more favorable in 168 or 32.8% of the observations and no change was noted during the decade in 51 or 9.9% of the observations.

Table 6.—Summary Table Showing Change between 1953 and 1963 in 19 Homogeneous Locality Groups on 9 Categories of School Practices

Summary School Practices	Number Observations Favored in 1953	Number Observations Showing No Change	Number Observations Favored in 1963	Total Observations
1. Elementary School Practice	46	15	72	133
2. School Organization and reorganization	29	7	40	76
3. Pupil Transportation	6	3	29	38
4. School Lunch	3	1	15	19
5. Out-of-School Activities	14	2	3	19
6. High School Program	13	4	40	57
7. Teacher Training	17	3	18	38
8. Adult Education	32	8	17	57
9. Educational Attainment and Aspiration	8	8	60	76
Total No. of Observations	168	51	294	513
Per Cent	32.7%	9.9%	57.4%	100.0%

[20] For a detailed breakdown of each school practice see Maughan, op. cit., pp. 74-109.

Table 7 shows a composite of all observations made on nine categories of school practices in heterogeneous localities and indicates change in attitude and opinion between 1953 and 1963. The data reveal that the heterogeneous groups were more favorable toward school practices in 1963 than in 1953. In addition, in 1963 the heterogeneous localities showed greater favorability toward school practices than the homogeneous localities. A total of 513 observations were made. The 1963 groups were more favorable in 314 or 61.2% of the observations, groups in 1953 were more favorable in 156 or 30.4% of the observations and 43 or 8.4% of the observations showed no change between 1953 and 1963.

Table 7.—Summary Table Showing Change Between 1953 and 1963 in 19 Heterogeneous Locality Groups on 9 Categories of School Practices

Practices	Number Observations Favored in 1953	Number Observations Showing No Change	Number Observations Favored in 1963	Total Observations
1. Elementary School Practice	38	8	87	133
2. School Organization and Reorganization	22	8	46	76
3. Pupil Transportation	5	0	33	38
4. School Lunch	3	4	12	19
5. Out-of-School Activities	13	1	5	19
6. High School Program	18	3	36	57
7. Teacher Training	16	4	18	38
8. Adult Education	27	9	21	57
9. Educational Attainment and Aspiration	14	6	56	76
Total No. of Observations	156	43	314	513
Per Cent	30.4%	8.4%	61.2%	100.0%

A statistically significant change showing a more favorable attitude and opinion toward school programs was identified in 12 of the 27 items under investigation. Of the 12 items, 8 showed statistically significant change toward more favorability for both the homogeneous and heterogeneous groups while 3 were significant for the homogene-

ous groups only and 2 for the heterogeneous groups only. Ten other items showed favorable change in attitude but were not statistically significant at the 5% level.

Unfavorable change in attitude and opinion toward school programs was identified in 9 of the 27 items. One of these practices was statistically significant at the 1% level for the homogeneous group. The specific items are identified in the groups of items which follow.

School Practices and Programs in Which there Was Statistically Significant Change between 1953 and 1963.

1. The number of grades each elementary teacher can best handle with 25 pupils. (1% level, homogeneous and heterogeneous)
2. The number of physical education facilities and personnel that should be available. (1% level, homogeneous and heterogeneous)
3. The kind of school organization considered most desirable. (1% level, homogeneous and heterogeneous)
4. The distance elementary school pupils are expected to walk. (1% level, homogeneous and heterogeneous)
5. The kind of school lunch pupil should have while at school. (1% level, homogeneous)
6. The formal educational attainment necessary for boys to be farmers. (1% level, homogeneous; 5% level, heterogeneous)
7. The formal educational attainment necessary for girls to be farmers' wives. (1% level, homogeneous and heterogeneous)
8. The educational attainment of the wife. (1% level, homogeneous)
9. The educational attainment of the husband. (5% level, homogeneous; 1% level, heterogeneous)
10. The educational attainment of the children who have terminated their formal education. (5% level, homogeneous)
11. The education desired by parents for their children who are still in school. (5% level, homogeneous; 1% level, heterogeneous)
12. The necessity of modern conveniences in the school. (1% level, heterogeneous)

School Practices and Programs in Which Change Was Favorable, but Not Significant, among both Homogeneous and Heterogeneous Locality Groups, 1953-1963

1. The present emphasis placed on reading, writing and arithmetic.
2. The importance of art, music and recreation in the school.
3. The importance of modern conveniences in the school.

4. The tax rate and school reorganization.
5. The desirability of the school district providing transportation for the children.
6. The kind of school lunch pupils should have while at school.
7. The formal education required for high school teachers.
8. The formal education required for elementary teachers. (Heterogeneous only)
9. The educational attainment of the wife.
10. The educational attainment of children who have terminated their formal education.

School Practices and Programs in Which Unfavorable Change Was Identified between 1953 and 1963 among Homogeneous and Heterogeneous Groups

1. Parents and Teachers planning together what is to be taught in the school. (1% level, homogeneous; change not significant for heterogeneous)
2. The provision of health examinations by the school. (5% level, homogeneous and heterogeneous)
3. Satisfied with publicity regarding school reorganization. (5% level, homogeneous and heterogeneous)
4. Favorability toward parent organizations in the school. (5% level, homogeneous and heterogeneous)
5. Favorability toward the 16 year-old attendance law. (5% level, homogeneous and heterogeneous)
6. The interest of adults in agriculture and home economics evening classes. (5% level, homogeneous and heterogeneous)
7. The desire of adults to attend evening classes. (5% level, homogeneous and heterogeneous)
8. Past or present attendance at evening classes. (5% level, homogeneous and heterogeneous)
9. Formal education required for elementary teachers. (5% level, homogeneous)

Change in Acceptance of Farm Practices between 1953 and 1963. Figure 1 illustrates changes in acceptance of improved farm practices between 1953 and 1963. The mean acceptance score for the 19 homogeneous locality groups in 1953 was 41.4, while for the heterogeneous groups the score was 45.2. One decade later the mean score for the homogeneous group was 47.7 and that of the heterogeneous group was 49.7.

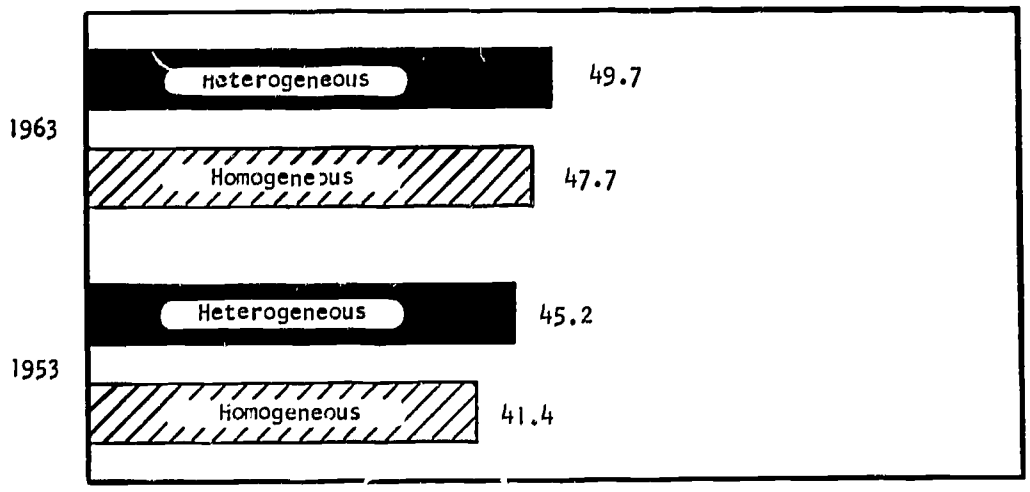

Fig. 1: Mean Score Comparison between 1953 and 1963 among Homogeneous and Heterogeneous Locality Groups Indicating Change toward Greater Acceptance of Improved Farm Practices.

Figure 2 illustrates graphically the results obtained when the locality groups homogeneous in 1953 are dichotomized into those which remained homogeneous during the decade and those which became heterogeneous. None of the heterogeneous became homogeneous during the 10-year period. Three locality group types are shown: Homogeneous, Heterogeneous and Changed.

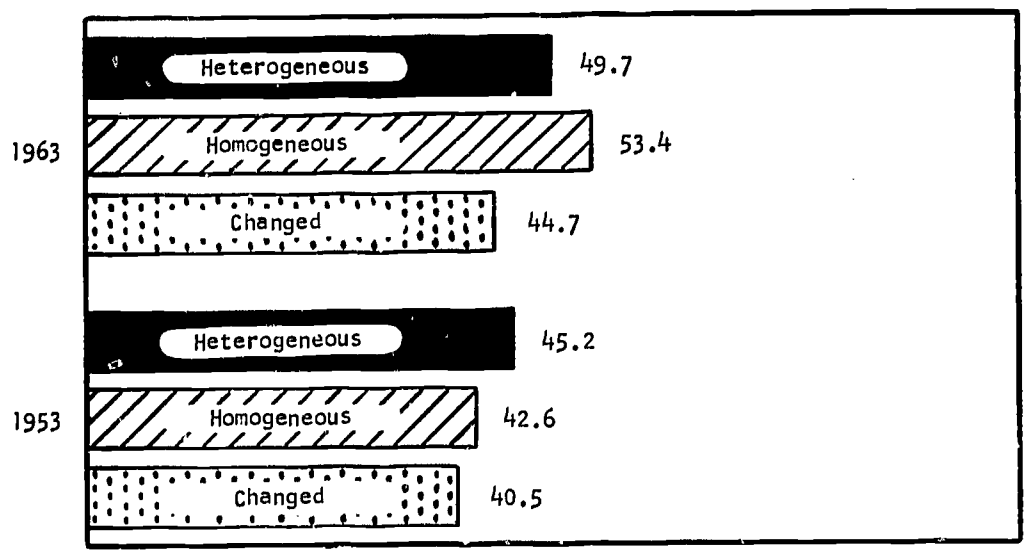

Fig. 2: Mean Score Comparison between 1953 and 1963 among Heterogeneous Locality Groups (Hetero 1) Those That Remained Homogeneous and Those That Lost Homogeneity (Changed) Indicating Change toward Greater Acceptance of Improved Farm Practices.

The mean acceptance score for the 19 heterogeneous locality groups was 45.2 in 1953 and 49.7 in 1963. The changed locality group's scores averaged 40.5 in 1953 and 44.7 in 1963. When the acceptance scores are compared between these 2 groups and plotted as in Fig. 2, it is noted that the resultant increases parallel each other. The changed group's score was 4.7 points below the heterogeneous group's score in 1953, and it was 5.0 points below in 1963.

The locality group that remained homogeneous exhibited a striking degree of change in the acceptance of improved farm practices over the 10-year period. The mean acceptance score for these locality groups was 42.6 in 1953 and 53.4 in 1963.

Changes in Organizational Participation Between 1953 and 1963. No statistically significant differences were found between the 19 homogeneous and 19 heterogeneous locality groups when they were compared on organizational participation. Table 8 shows a comparison between the 2 locality types on organizational participation for 1953 and 1963. The 4 elements constituting organizational participation are membership, attendance, offices held and committee service. Locality group pairs that indicated no change in organizational participation are not included in Table 8.

Table 8.—A Comparison between Homogeneous and Heterogeneous Locality Groups in the Family Organizational Participation in 1953 and 1963

	No. Pairs Participation Highest in Homogeneous		No. Pairs Participation Highest in Heterogeneous	
	1953	1963	1953	1963
1. Number of memberships in formal organizations	11	11	7	8
2. Attendance at meetings during past year	9	9	10	9
3. Offices held in formal organizations during past five years	8	8	11	10
4. Committees served on during past year	5	10	13	8
Total No. Pairs of observations	33	38	41	35

Families living in homogeneous locality groups belonged to more organizations than did those in heterogeneous localities in both 1953 and 1963. No differences were found between these groups in attendance at meetings in 1963 and only slight differences were found when results of the 1953 and 1963 studies were compared. Respondents in the heterogeneous locality groups indicated more officer leadership than did those in homogeneous neighborhoods in both 1953 and 1963 and little change was noted between the 2 groups during this 10-year period. In 1953 heterogeneous groups had higher mean scores for committee participation in 13 of the 19 pairs of localities. In 1963 the heterogeneous groups with higher mean scores were reduced to 8 of the 19 pairs and the homogeneous groups had higher scores in 10 of the 19 pairs.

A composite summary of Table 8 indicates no significant difference at 5% level between the homogeneous and heterogeneous groups in 1963. However, when the 1953 and 1963 results are noted, the homogeneous group's mean scores for organizational participation increased, while those scores for the heterogeneous group decreased.

In the 1953 study it was found that the homogeneous locality residents participated to a greater extent in church and social organizations, while heterogeneous locality group residents showed greater participation in agricultural and school organizations. Results of the 1963 study reveal that rural adults living in homogeneous locality groups participated more in farm organizations than did those in heterogenous or changed locality groups. Adults in the homogeneous locality group type were less inclined to participate in school and civic organizations than were those in the other groups. There were no significant differences among the groups in religious or social participation in 1963. The farm economic situation may have affected the kinds of organizational participation of the homogeneous group. The apparent increase in farm organizational participation in homogeneous localities may be due to a struggle for economic survival. An alternative explanation could be recruitment by farm organizations among homogeneous locality group types that was more vigorous during this period than it had been earlier.

Table 9 compares the 2 locality types on selected cultural factors in 1953 and 1963. The factors are socio-economic status, neighborhood strength, and family strength. The results showed that homogeneous groups in 1953 and 1963 had higher mean scores than did the heterogeneous matched pair for each of the cultural factors. Locality group pairs indicating no change were not included in Table 9.

Table 9.—The Comparison between Homogeneous and Heterogeneous Locality Groups on Selected Cultural Factors: Socio-Economic Status, Index of Neighborhood Strength, Index of Familism in 1953 and 1963

	No. Pairs Practice Favored by Homogeneous		No. Pairs Practice Favored by Heterogeneous	
	1953	1963	1953	1963
1. Socio-economic status	5	5	14	14
2. Neighborhood strength	10	11	8	8
3. Family strength	13	12	6	7

The data indicated no relative change in socio-economic status scores between 1953 and 1963. Heterogeneous groups scored higher than did homogeneous groups in 14 of the 19 pairs in both 1953 and 1963.

Slight change was noted in locality group strength during the decade. The homogeneous group indicated a higher mean score in 10 of the 19 pairs in 1953 and 11 of the 19 pairs in 1963.

EXTENSIONS OF THE STUDY

The locality groups studied in 1953 by Duncan in his investigation of homogeneous locality groups provided an excellent opportunity to study rural adults who now live and who have been living in homogeneous or heterogeneous locality groups or in locality groups which have changed from homogeneous to heterogeneous during the decade.

While Duncan studied similarities and differences between paired locality groups on their acceptance of educational and farming practices and organizational participation, Butterfield's study compared adults in the 3 locality group types on the basis of their attitud. on these same factors but added measures on favorability toward (a) more current educational practices and (b) adult educational participation. Also compared were adults of differing religious-ethnic patterns on their attitudes toward the aforementioned variables. In addition the locality group types were compared on their orientation to learning in accordance with definitions established by Sheffield.[21]

Analysis of variance was employed to make the comparisons called for in the hypotheses to be tested on educational practice and participation. Chi-square tests were applied to expected and observed frequencies in the learning orientation statements from the locality group types.

[21] Solomon, Daniel, Editor, *The Continuing Learner*, Brookline, Massachusetts: The Center for the Study of Liberal Education for Adults, 1964, pp. 1-23.

It is not intended to generalize results of the study beyond the locality groups sampled and/or those in the midwest which fit the criteria established in the study. Analysis of variance was used because it is a sensitive and conservative test for determining differences between mean scores where the sample used in the study is selected at random from within each locality group.

Comparison of the 3 Locality Group Types on Attitude Favorability. There were no significant differences among homogeneous, heterogeneous and changed (homogeneous) locality group types in their attitude toward current educational practices when these practices were scored as a composite. When considering the component parts, the heterogeneous group scored significantly higher than did the changed group on elementary school practices. The homogeneous group was significantly lower than the changed and heterogeneous groups in attitude scores related to high school programs.

Rural adults living in the heterogeneous locality group type scored significantly higher in attitude toward adult educational participation than did the rural adults living in the homogeneous group type. The heterogeneous group scored significantly higher than did the homogeneous group on the following 4 components of adult educational participation: (a) County Agent, Home Agent, Vocational Agriculture and Home Economics teacher classes, (b) Vocational Classes, (c) Recreational activities and (d) Use of available sources of technical information. The heterogeneous locality group also scored significantly higher than did the changed group on use of available sources of technical information. The changed group's score exceeded the homogeneous group's score on recreational activities by a significant margin.

No significant differences were found among the groups in organizational participation; however when compared as to the organizational types in which they participated significant differences were noted as follows: (a) The homogeneous group's farm organizational participation was greater than the changed group's. (b) In school and civic organizational participation both the heterogeneous and changed group's scores exceeded that of the homogeneous group.

Attitude Favorability of Religious-Ethnic Patterns among Locality Group Types. Duncan placed each religious-ethnic pattern on a continuum denoting their general attitude favorability toward school programs and practices in 1953. He ranked them from high to low in the following manner: (a) German and Polish-Catholic, (b) German-Lutheran, (c) Norwegian-Lutheran and (d) Danish-Lutheran.

Although the religious-ethnic patterns in this study did not differ significantly in score for attitude toward educational programs and practices, they can be ranked generally according to their mean scores indicating attitude favorability. Their ranking from low to high follows: (a) Polish-Catholic, (b) Danish-Lutheran, (c) German-Catholic, (d) Swiss-Evangelical and (e) Norwegian-Lutheran. It is evident that the Danish-Lutheran group is considerably lower in rank in this study than in Duncan's study. More data are necessary than are available from this study in order to determine reasons for this change. Other groups do not differ greatly from the ranks established by Duncan in 1953.

When each of the religious ethnic patterns was compared across locality group type, the data reveal that Danish-Lutherans living in the heterogeneous locality group type hold significantly more positive attitudes toward organizational participation than do those living in homogeneous or changed group types. No significant differences attributed to locality group type were found among the German-Lutherans, the Swedish-Lutherans or Polish-Catholics on any of the dependent variables. The German-Catholics sampled in heterogeneous locality groups were significantly more favorable in attitude toward adult educational participation than were those sampled in the homogeneous group type.

When adults from the religious-ethnic patterns living in homogeneous locality groups were compared, there was a significant difference among the groups in their attitude toward organizational participation. The Swiss-Evangelical group had a significantly higher mean score than did any of the other groups. The Danish-Lutherans scored significantly lower than did the Norwegian-Lutherans and the German-Catholics.

The 5 homogeneous locality groups were compared using an ANOVA test on the basis of the organizational types in which they participated with the following results showing significant differences at the 5% level:

a. Farm Organizations
   Swiss-Evangelical > all other patterns
   Norwegian-Lutheran > Danish Lutheran
   German-Catholic > Danish Lutheran

b. School and Civic Organizations
   Swiss-Evangelical > German-Catholic
   Swiss-Evangelical > Danish-Lutheran

c. Religious Organizations
   German-Catholic > Danish-Lutheran
   Swiss-Evangelical > Danish-Lutheran
   Norwegian-Lutheran > Danish-Lutheran

Learning Orientations among Locality-Group Types. The 5 continuing learning orientations tested in this study are: (1) **learning oriented** (meaning essentially that learners with this orientation seek knowledge for its own sake) (2) **personal-goal oriented** (learners seek to accomplish clear-cut personal objectives that are immediate and practical) (3) **social-goal oriented** (learners are motivated by a concern for the community or society) (4) **desire-socialibity oriented** (learners find in the circumstances of the learning an interpersonal or social meaning) and (5) **need-activity oriented** (those who find in the learning situation an introspective or intra-personal meaning.)[22]

These orientations were developed by Sheffield[23] in adult conference settings and used in this study with rural adults in selected cultural settings. This study included analysis of 500 statements made by the rural adults in the sample as to their reasons for participation in adult educational activities. Four independent judges were in full agreement on their categorization of 476 of the statements into the five learning orientations. For the remaining, 3 of the 4 judges were in agreement on 18 statements. Only 6 statements were judged not codable. This substantiates Sheffield's orientations as useful means of classifying adult learning orientation in a rural setting.

Two hundred forty-nine or 66% of the rural adults of the sample made statements indicating interest in some kind of adult educational activity. They averaged 2.01 statements per individual on a 3-point-maximum scale. This indicates a tendency toward broad rather than narrow interest. No significant differences were found among the locality group types in numbers of total statements made.

There were significant differences at the 5% level among the locality group types in the number of **need-fulfillment** statements made. Homogeneous respondents made considerably fewer such statements than expected, while the heterogeneous and changed group each made more than expected. This might be a result of the greater fulfillment of need for acceptance by the homogeneous group to which these respondents belonged.

The locality group types differed significantly in the total number of **learning oriented** statements made and the number they might be expected to make. The homogeneous group made about the expected number; however, the heterogeneous group made considerably fewer than expected while the changed group made considerably more than

[22] Solomon, *op. cit.*,

[23] Solomon, *op. cit.*

expected. The results indicate a greater desire to know and understand on the part of the changed group. The state of transition between being homogeneous and heterogeneous may be a stimulant to learning.

No significant differences were observed among the religious-ethnic patterns when the various groups were compared on orientation statements.

The extension of the 1953 study into the orientation of homogeneous, heterogeneous and changed groups toward adult education activities lead to these generalizations:

1. Sheffield's learning orientation categories are useful in describing motivations of rural adults who live in cultural settings similar to those described in this study.

2. The rural adults of this study and adults living in cultural settings similar to those described are interested in adult educational activities, and this interest is not limited to vocational factors.

3. Rural adults living in homogeneous locality group types are motivated less by need-fulfillment than are rural adults living in heterogeneous and changed locality group types.

4. Rural adults from the changed group are more learning oriented than are rural adults from the homogeneous and heterogeneous groups.

IMPLICATIONS OF THE STUDY

The basic purpose of the restudy was to investigate the acceptance of certain educational programs and practices in selected rural locality groups in Wisconsin and examine the extent to which change in acceptance of these educational programs and practices has occurred between 1953 and 1963.

The findings and conclusions in this investigation have major significance to the 38 localities under investigation. The implications listed below and others are relevant to other localities and communities which meet the cultural, social, economic and educational criteria established for their delineation in this study. The information can be useful to

educators at all levels in formulating, planning, implementing and evaluating educational programs.

1. Knowledge of the differences in attitudes held by rural ethnic groups toward school practices are useful to specialists in Co-operative Service Agencies, superintendents, principals, and teachers in planning school programs and in pursuing curriculum and teaching developments.

2. The need for joint parent and teacher planning of the curriculum and the need for parent organizations in the school was held in less regard in 1963 than in 1953 for those in homogeneous locality groups. Earlier studies of homogeneous locality groups showed that they placed high value on assisting the teacher plan the curriculum around the local needs and interests of the children. The advent of the multi-district integrated school, focusing on the total needs of youth in modern society, has brought with it an expanded curriculum. The present apathy in homogeneous and heterogeneous locality groups toward joint planning may be due to the lack of parent understanding of education needs in modern society, the complexity of the curriculum and its possible isolation from other community activities.

3. Both homogeneous and heterogeneous locality groups have increased in acceptance of improved farm practices between 1953 and 1963; however, the homogeneous groups have increased at a more rapid rate. This phenomenon may be due to a number of educational, economic and social factors. Homogeneous groups had farther to go in adoption of farm practices since they had adopted fewer practices in 1953. Since the original study, mass media have aided Extension Service personnel and other educational agencies in keeping rural people informed of research at the university and industrial level. Farm adults' level of education has moved up since 1953 and with it has even an increasing desire for additional education for their children. The farm depression of the past decade coupled with government aid programs has motivated people to adopt improved practices in order to compete economically with other segments of society. Homogeneous groups are becoming less resistant to outside influences and therefore adoption may be a group decision within the locality. It is entirely possible that Roger's classification of individual adoption practice is functioning on a locality group basis;

the heterogeneous groups being analogous to the innovator, early adopters and early majority while the homogeneous groups are analogous to the later majority and laggards.

4. Formal and informal educational programs ought to take into account the expanded horizons of rural adults and encompass the interest in social and cultural improvement and economic development.

5. The significant differences favoring the heterogeneous locality group type in attitude toward adult education, including use of available sources of technical information, implies that an effective mode of communicating the urgency of an adequately informed citizenry has not been accomplished with those rural adults who live in homogeneous or recently changed locality groups.

6. In these studies rural adults living in homogeneous locality groups showed signs of apathy toward school and civic organizational participation. This evidence, together with the evidence that the homogeneous group holds a lower degree of attitude favorability toward high school and adult educational participation, points out the probability that adult educators are not effectively influencing this group of rural adults toward continuing their education.

7. There are differences in degree of attitude favorability held by religious-ethnic patterns according to the locality groups type in which they live. For example, the Danish-Lutherans and German-Catholics who live in heterogeneous locality group types show a significantly higher degree of attitude favorability toward adult education and organizational participation than do subjects in these religious-ethnic patterns who live in homogeneous locality groups. This phenomenon lends support to the contention that it is the homogeneous condition rather than the religious-ethnic pattern that tends to have the greater effect on attitude toward organizational participation. A reversal of pattern is found within the Swiss-Evangelical group where the homogeneous group is ahead on the score for current educational practices and organizational participation. On these analyses the within group variance is great, and no significant differences were found. The evidence is inconclusive.

8. Rural adults living in the homogeneous locality group type appear to see educational activity for reasons other than need-fulfillment. This could very well mean that they have greater security and feelings of acceptance within their group and, thus, are not motivated to go beyond their present group relationship for need-fulfillment.

9. The changed group made more total learning statements than expected and the heterogeneous made fewer. The changed group may have made more learning statements because members are an emerging group not yet affiliated with the greater heterogeneous society and are now seeking answers not previously important to them as a homogeneous society.

LIMITATIONS

The significance of these results can be meaningful only when the limitations of the investigation are understood. Studies in the field of the social sciences seldom if ever have optimum experimental situations. The continually changing conditions and the multiplicity of related factors make difficult the task of isolation and control of variables. In this study cell frequencies were impossible to predetermine, and thus clear-cut statistical procedures were difficult to establish before collection of the data. Conditions were representative of life situations and not laboratory conditions where exacting controls are possible.

It should be pointed out that the samples were not stratified according to age, and population mobility was not checked. Exacting ratios of sample to total population were not calculated for each locality group in 1963. The range of the ratios of samples to total population in 1953 was from 20 to 75% among the 38 locality groups sampled. Nevertheless, a review of methods and procedures used in the study reveals that most variables which would not normally be accounted for by randomization were taken into account.

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The cover photograph shows the Reading Laboratory in the Instructional Materials Center of the high school in the Wisconsin Heights School District of Black Earth and Mazomanie, Wisconsin, and is used with their permission.